

# R E M A R K S

The drawing was objected to. The Examiner directed that FIG. 1 should include a “prior art” legend, and that element 356 should be shown in FIG. 2. Amended FIGS. 1 and 2 are included herein for the Examiner’s approval.

Claim 18 was rejected under 35 USC 112. This rejection is moot, since claim 18 is deleted. Claims 6-9, 12-17, and 21 were also deleted.

Claims 1-8, 10-17, and 19-25 were rejected under 35 USC 103 as being obvious over Tounai et al, US Patent 5,870,382, in view of Rogers, US Patent 6,061,735. Applicant respectfully traverses but, in order to expedite prosecution, claim 1 is amended. As amended, it is believed that the outstanding claims are clearly not obvious in view of the two references.

The Tounai et al reference teaches a module (equipment #1) that contains a control 5, a switch 4, and a bridging unit 3. The bridging unit provides two ports for sending a given signal over two separate and distinct lines to another module (equipment #2). The two lines are termed “W-line” and “P-line,” where the W and the P stand for “working” and “protection,” respectively. The Rogers reference is included for its teaching of providing a user-provided directive, and for its teaching of a threshold that is a predetermined number of spare segments that the network administrator defines, so that a complete plan of regeneration only occurs when spare segments have been added to warrant the complete regeneration.

Amended claim 1, however, specifies numerous attributes that are not present in the combination of the Tounai et al and Rogers references. Specifically, claim 1 defines an arrangement that comprises an ATM switch, a controller associated with the ATM switch, and two I/O modules. The first I/O module is connected to a protection line, and the second I/O module is connected to a service line. The two I/O modules are physically distinct. In Tounai et al, in contradistinction, both the protection line and the service line are connected to a single module (bridging unit 3). Thus, the broad structure of claim 1 is not present in Tounai et al. Additionally, the details that characterize the claim 1 structure are also not present. For example, in Tounai et al, there is no I/O module that has a framer. Viewed conversely, neither the protection line nor the service line are connected to anything that includes a framer (rather, what the service and protection lines are

connect to is a bridging unit). Further, in Tounai et al there is no ATM switch fabric through which communication can be conducted between the I/O module that is coupled to the protection line and the I/O module that is coupled to the service line. Still further, there is no communication to any framer to direct the placement of the service line, or the protection, line in an active state or a standby state; and certainly, there is no such communication through an ATM switch fabric.

The Rogers reference adds nothing by way of the above-mentioned limitations that are present in amended claim 1 and are missing in the Tounai et al reference.

Accordingly, it is respectfully submitted that amended claim 1 is clearly patentable over Tounai et al and Rogers combination of references.

Because of the drastic differences between amended claim 1 and the combination of the Tounai et al and Rogers references, the outstanding claims numbered less than 26, which depend on claim 1 are also significantly different and, therefore, patentable over the Tounain et al and Rogers combination of references. Moreover, these claims include additional limitations that render them not obvious in view of these references.

To give one example, claim 2 depends on claim 1 and, additionally specifies a limitation that is not present in the combination of the Tounai et al and Rogers references. That is, it specifies that the decision logic specified in claim 1 is *within* a controller that is associated with the ATM switch fabric. The closest that Tounai teaches is control element 5, which is associated with switch 4, but switch 4 is not an ATM switch fabric, and its interconnections do not correspond to the interconnections of the ATM switch fabric that are specified in claim 1.

Newly added claim 26 is independent. It specifies an I/O module that includes the following elements:

- A line interface unit that is adapted to be connected to a signal line,
- A framer that is connected to the line interface unit,
- An ATM processing unit connected to the framer,
- A processor coupled to the framer and to the ATM processing unit, and
- The ATM processing unit being adapted to be connected to an ATM switch.

No cohesive correspondence can be established between any of the claim 26 elements and elements of the Tounai et al reference. For example, one might view the bridging

unit 3 as the "line interface unit" of claim 26 because it is adapted to be connected to a signal line, but it is not connected to a framer. One might view control unit 5 as the "ATM processing unit" of claim 26, but it is neither connected to a framer nor connected to a port that is adapted to be connected to an ATM switch. One might also view control unit 5 as the "processor" of claim 26, but is not connected to a framer, and it is not connected to an ATM processing unit. Applicant respectfully submits, therefore, that claim 26 is patentable over the Tounai et al reference, taken singly, or in combination with any of the other known references.

Additionally, claim 26 specifies that the signal line that may be connected to the I/O unit is of a type A, that processing unit sends signals through the ATM port to affect another I/O module that is coupled to another signal line, and that the signal line that may be connected to this other I/O module is of a different type, i.e., type B.

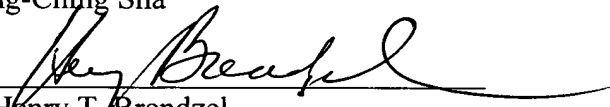
Clearly, these additional limitations of claim 26 make the claim even more patentable over the Tounai et al reference, taken singly, or in combination with any of the known references.

Claim 27 and 28 depend on claim 26, and are believed to be equally patentable.

In light of the above amendments and remarks, applicant respectfully submits that all of the Examiner's objections and rejections have been overcome. Reconsideration and allowance are, therefore, respectfully solicited.

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Respectfully,  
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